## CE Class Spinpoint F1 CE



Сара	acity	250GB	320GB	500GB	640GB	750GB	1TB
Model	8MB	HA251HJ	HA321HJ				
	16MB			HA501IJ	HA642JJ		
	32MB					HA751LJ	HA101UJ

## **FEATURES**

- MAX.334GB Formatted Capacity Per Disk
- Serial ATA 3.0Gbps Interface Support
- Improved recording stability over temperature with PMR
- Advanced dynamic FOD control for best data integrity
- Intelligent compensation of external disturbance
- SATA Native Command Queuing Feature
- Device Initiated SATA Power Management
- Rotational vibration sensor

DRIVE CONFIGURATION

- Environment friendly product with RoHS compliance
- Improved performance with dual-ARM based firmware
- ATA S.M.A.R.T. Compliant
- ATA Automatic Acoustic Management Feature
- ATA 48-bit Address Feature
- ATA Device Configuration Overlay Feature
- NoiseGuard™
- SilentSeek™

Interface	Serial ATA 3.0Gbps
Buffer DRAM Size <sup>2</sup>	8 / 16 / 32 MB
Byte per Sector	512 bytes
Rotational Speed	7,200 RPM

PERFORMANCE SPECIFICA	TIONS	
Average Seek time (typical)		8.9 ms
Average Latency		4.17 ms
Data Transfer Rate		
Media to/from Buffer (Max.)	17	5 MB/sec
Buffer to/from Host (Max.)	30	0 MB/sec
Drive Ready Time (typical)	160~320GB	10 sec
	500 1000CR	14 000

, ,	500~1000GB	14 sec
RELIABILITY SPECIFICATI	ONS	
Non-recoverable Read Erro	r 1 sector	in 10 <sup>15</sup> bits
Start/Stop Cycles		50,000

ACOUSTICS <sup>3</sup>		
Idle	160~320GB	2.45 Bel
	500-1000GB	2.70 Bel
Performance Seek	250/320GB	2.80 Bel
	500-1000G	2.90 Bel

POWER REQUIREMENTS					
Voltage		+5V±5%, +	12V±10%		
Capacity <sup>1</sup>	160GB 250GB 320GB	500GB 650GB	750GB 1000GB		
Spin-up Current (Max	2.0A	2.0A	2.0A		
Seek (typical) <sup>4</sup>	5.7W	6.9W	7.6W		
Read/Write (typical)	6.1W	7.4W	8.4W		
Idle (typical)	4.4W	5.7W	6.7W		
Standby (typical)	0.7/1W	0.7/1W	0.7/1W		
Sleep (typical)	0.7/1W	0.7/1W	0.7/1W		

ENVIRONMENTAL SPECIFIC	CATIONS		
Temperature			
Operating		0 ~ 60 °C	
Non-operating		-40 ~ 70 °C	
Humidity (non-condensing)			
Operating		5 ~ 90 %	
Non-operating		5 ~ 95 %	
Linear Shock (1/2 sine pulse)	)		
Operating		70G	
Non-operating	160~320GB	350 G	
	500~1000GB	300 G	
Altitude (relative to sea level)	)		
Operating	-300 to 3,000 m		
Non-operating	-300 to 12,000 m		

PHYSICAL DIMENSION		
Height (Max.)		26.1 mm
Width		101.5 mm
Length		147.0 mm
Weight (avg.)	160~320GB	470 g
	500/640GB	610 g
	750/1000GB	650 g

- \* Note : Design and specifications are subject to change without prior notic
- 1.1MB = 1,000,000 Bytes, 1GB=1,000,000,000 Bytes
- 2. A small portion of the 8/16/32MB buffer memory is reserved for firmware use
- 3 Average value with a high performance cover.
- 4 Random seek with 30% duty cycle.(Average value)

